JAVA.IO.PIPEDINPUTSTREAM CLASS

Introduction

The **java.util.PipedInputStream** class is a piped input stream that can be connected to a piped output stream, the piped input stream then provides whatever data bytes are written to the piped output stream.Following are the important points about PipedInputStream:

- The piped input stream contains a buffer, decoupling read operations from write operations, within limits.
- Attempting to use both objects from a single thread is not recommended, as it may deadlock the thread.
- A pipe is said to be broken if a thread that was providing data bytes to the connected piped output stream is no longer alive.

Class declaration

Following is the declaration for **java.util.PipedInputStream** class:

```
public class PipedInputStream
  extends InputStream
```

Field

Following are the fields for **java.util.PipedInputStream** class:

- **protected byte[] buffer** -- This is the circular buffer into which incoming data is placed.
- **protected int in** -- This is the index of the position in the circular buffer at which the next byte of data will be stored when received from the connected piped output stream.
- **protected int out** -- This is the index of the position in the circular buffer at which the next byte of data will be read by this piped input stream.
- **protected static int PIPE_SIZE** -- This is the default size of the pipe's circular input buffer.

Class constructors

S.N.	Constructor & Description
1	**PipedInputStream()** This creates a PipedInputStream so that it is not yet connected.
2	**PipedInputStream(int pipeSize)** This creates a PipedInputStream so that it is not yet connected and uses the specified pipe size for the pipe's buffer.
3	**PipedInputStream(PipedOutputStream src)** This creates a PipedInputStream so that it is connected to the piped output stream *src*.
4	**PipedInputStream(PipedOutputStream src, int pipeSize)**

	This creates a PipedInputStream so that it is connected to the piped output stream *src* and uses the specified pipe size for the pipe's buffer.

Class methods

S.N.	Method & Description
1	int available() This method returns the number of bytes that can be read from this input stream without blocking.
2	void close() This method closes this piped input stream and releases any system resources associated with the stream.
3	void connect(PipedOutputStream src) This method causes this piped input stream to be connected to the piped output stream *src*.
4	int read() This method reads the next byte of data from this piped input stream.
5	int read(byte[] b, int off, int len) This method reads up to *len* bytes of data from this piped input stream into an array of bytes.
6	protected void receive(int b) This method receives a byte of data.

Methods inherited

This class inherits methods from the following classes:

- java.util.InputStream
- java.util.Object